IN THE CLAIMS:

1. (currently amended) A process ~~of synthesis of a family of~~ for synthesizing a microporous ~~materials that are comprised under the name~~ ITQ-16 material~~, with~~ having an X-ray diffraction pattern ~~like the one present in Table 1 that comprises~~ with diffraction peaks at 2θ angles of 6.9°, 7.6° and 9.6° ~~and wherein the relative intensity of the peaks at 6.9 ° and 9.6° with respect to the intensity at the peak at 7.60 complies with the ratio I9.6° /I7.6° being larger than zero and less than •, characterized in that the synthesis is carried out using hydroxide anions as a mineralizing agent, without introducing fluorides as mineralizing agent, and in the presence of organic compounds such as structure directing agents~~ comprising the steps of:

a) providing a reaction mixture comprising a Si source, a Ge source, and an organic structure directing agent;

b) adding a source of hydroxide to obtain an initial pH between 14 and 9; and

c) heating the reaction mixture at a temperature between 80°C and 250°C.

2. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 1, ~~characterized in that~~ wherein the organic ~~cations~~ structure directing agent is selected from the group ~~comprised~~ consisting of tetraalkylammonium organic cations ~~of the tetraalkylammonium type with~~ having a general formula $(R1R2R3R4N)^+$, wherein R1, R2, R3 and R4 may be alkyl or aromatic chains with 1 to 16 carbon atoms, ~~that may or may not form cycles on the nitrogen atoms,~~ and organic polycations ~~of~~ having a general formula $R_nN_x((CH_2)_n)_p$ wherein x ~~varies~~ is between 2 and 12, n refers to the number of carbon atoms ~~that form some of the~~ forming alkyl chains bridge between two contiguously nitrogen atoms and ~~varies~~ is between 1 and 6, p refers to number of alkyl ~~chains bridge existing~~ chain bridges between nitrogen atoms and ~~varies~~ is between 2 and 24, R represents alkyl or aryl groups bonded to a single nitrogen atom (N) containing between 1 and 12 carbon atoms and m ~~varies~~ is between 0 and 36 are used as structure directing agents.

3. (cancelled) ~~A process of synthesis of a family of microporous materials according to claim 1, characterized in that it comprises heating to a temperature between 80°C. and 250° C., at an initial pH comprised between 14 and 9, a reaction mixture that contains at least:~~

~~a SiO_2 source,~~

~~a GeO_2 source,~~

~~an organic cation and~~

~~H_2O.~~

4. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim ~~3~~ 1, ~~characterized in that~~ wherein the reaction mixture is heated to a temperature between 130° C. and 175° C.

5. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim ~~3~~ 1, ~~characterized in that~~ wherein the pH of the initial reaction mixture is between 13 and 10.

6. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim ~~3~~ 1, ~~characterized in that~~ wherein the reaction mixture also contains a trivalent cation source.

7. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 6, ~~characterized in that~~ wherein the trivalent cation is selected from among Al, B, Fe and Cr.

8. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim ~~3~~ 1, ~~characterized in that~~ wherein the reaction mixture ~~also contains~~ further comprises a tetravalent cation source other than Si and Ge.

9. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 8, ~~characterized in that~~ wherein the tetravalent cation is selected from ~~among~~ the group consisting of Ti, Sn and V.

10. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 1, ~~characterized in that~~ wherein the organic ~~cation~~ structure directing agent is ~~any one of the ones indicated~~ selected from the group represented in FIG. 4.

11. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 1, ~~characterized in that~~ wherein the organic ~~cation used as a~~ structure directing agent is BD^+, and ~~in that~~ wherein the reaction mixture ~~composition in terms of~~ has molar ratios ~~is~~ within the following intervals:
$BD^+/(SiO_2+GeO_2)$=between 3 and 0.01,
$H_2O/(SiO_2+GeO_2)$=between 1000 and 0.5,
$GeO_3/(SiO_2+GeO_2)$, defined as g; =between 0.8 and 0.005.

12. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the molar ratio $BD^+/(SiO_2+GeO_2)$ is between 1 and 0.03.

13. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the molar ratio $H_2O/(SiO_2+GeO_2)$ is between 100 and 2.

14. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the molar ratio GeO_2, (SiO_2+GeO_2) is between 0.5 and 0.032.

15. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the molar ratio GeO_2, (SiO_2+GeO_2) is between 0.333 and 0.625.

16. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the reaction mixture ~~also~~ further comprises at least one trivalent element X such that ~~and~~ the molar ratio (Si+Ge)/X ~~wherein X represents said element in a trivalent oxidation state,~~ is ~~comprised between~~ at least 5 ~~and~~.

17. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 16, ~~characterized in that~~ wherein the molar ratio (Si+Ge)/X is larger than 15.

18. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 16, ~~characterized in that~~ wherein the molar ratio (Si+Ge)/X is larger than 20.

19. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the reaction mixture ~~also~~ further comprises at least one tetravalent element, T, other than Ge and Si.

20. (currently amended) A process of ~~of synthesis of a family of microporous materials~~ according to claim 19, ~~characterized in that~~ wherein the molar ratio SiO_2+GeO_2/TO_2 is ~~between~~ at least 10 ~~and~~.

21. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 19, ~~characterized in that~~ wherein the tetravalent element, T, is selected from ~~among~~ the group consisting of Ti, Sn and V.

22. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 19, ~~characterized in that~~ wherein the molar ratio SiO_2+GeO_2/TO_2 in the reaction mixture is larger than 20.

23. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 11, ~~characterized in that~~ wherein the reaction mixture also comprises an ~~alkaline~~ alkali metal or alkaline earth metal cation, M^{+n}.

24. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 23, ~~characterized in that~~ wherein the ~~alkaline~~ alkali metal or alkaline earth metal cation is selected from ~~among~~ the group consisting of Na, Ba, K, Ca and Mg.

25. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 23, ~~characterized in that~~ wherein the molar ratio M^{+n}/ SiO_2+GeO_2 is ~~between~~ less than 2 ~~and 0~~.

26. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 23, ~~characterized in that~~ wherein the molar ratio M^{+n}/ SiO_2+GeO_2 is ~~between~~ less than 1 ~~and 0~~.

27. (currently amended) A process ~~synthesis of a family of microporous materials~~ according to claim 23, ~~characterized in that~~ wherein the molar ratio M^{+2}/ SiO_2+GeO_2 is ~~between~~ less than 0.5 ~~and 0~~.

28. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim ~~3~~ 1, ~~characterized in that it also comprises a subsequent step of~~ further comprising roasting at a temperature higher than 450°C.

29. (currently amended) A process ~~of synthesis of a family of microporous materials~~ according to claim 28, ~~characterized in that~~ wherein ~~in~~ the roasting step yields~~,~~ a roasted and anhydrous material of an empirical formula:

$x(MXO_2):fTO_2:gGeO_2(1-g)SiO_2$

wherein

T represents at least one tetravalent element, T, other than Ge and Si,

X represents at least one element in a trivalent oxidation state,

M represents at least one ~~alkaline~~ alkali metal or alkaline earth metal cation,

the molar ratio $GeO_2/(SiO_2+GeO_2)$, defined as g; is between 0.8 and 0.005,

the molar ratio (Si+Ge)/X is ~~between~~ at least 5 ~~and •~~, and

the molar ratio SiO_2+GeO_2/TO_2 is ~~between~~ at least 10 ~~and •~~.

30. (currently amended) A ~~Microporous~~ microporous material prepared according to the process of claim 29, ~~characterized in that~~ wherein in the roasted and anhydrous state it has the empirical formula:

$x(MXO_2):tTO_2:gGeO_2(1-g)SiO_2$

wherein

T represents at least one tetravalent element, T, other than Ge and Si,

X represents at least one element in a trivalent oxidation state,

M represents at least one alkaline metal or alkaline earth metal cation,

the molar ratio $GeO_2/(SiO_2+GeO_2)$, defined as g; is between 0.8 and 0.005,

the molar ratio (Si+Ge)/X is ~~between~~ at least 5 ~~and •~~, and

the molar ratio SiO_2+GeO_2/TO_2 is ~~between~~ at least 10 ~~and •~~.

31. (cancelled)

32. (cancelled)

33. (cancelled)

34. (cancelled)

35. (cancelled)

36. (cancelled)

37. (cancelled)

38. (cancelled)

39. (new) A microporous material prepared by the process of claim 1.

40. (new) A microporous material prepared by the process of claim 21 wherein T is Sn.

41. (new) A microporous material prepared by the process of claim 21 wherein T is Ti.

42. (new) A method of cracking, hydrocracking or hydroisomerizing olefins comprising the step of providing a microporous material according to claim 39.

43. (new) A method of isomerizing, dewaxing or isodewaxing paraffins comprising the step of providing a microporous material according to claim 39.

44. (new) A method of alkylating olefins, alcohols, isoparaffins with olefins, or aromatics comprising the step of providing a microporous material according to claim 39.

45. (new) A method of performing an Oppenauer oxidation process comprising the step of providing a microporous material according to claim 39.

46. (new) A method of performing a Meerwein-Pondorf-Verley reduction process comprising the step of providing a microporous material according to claim 39.

47. (new) A method of amoxydating cyclohexanone comprising the step of providing a microporous material according to claim 39.

48. (new) A method of acylating substituted aromatic compounds using acids, acid chlorides or anhydrous chlorides of organic acids as acylating agents comprising the step of providing a microporous material according to claim 39.

49. (new) A method of alkylating according to claim 44 wherein the aromatic is benzene or propylene.

50. (new) A method of selectively oxidizing organic compounds using H_2O_2, organic peroxides or hydroperoxides as oxidizing agents comprising the step of providing a microporous material according to claim 39.

51. (new) A method of performing a Bayer-Villiger oxidation process comprising the step of providing a microporous material according to claim 39.

52. (new) A method for epoxydation of olefins, oxidation of alkanes, oxidation of alcohols, and oxidation of thioethers to sulfoxides and sulfones comprising the step of providing a microporous material according to claim 39.

53. (new) A process for eliminating organic vapors comprising the step of providing a microporous material according to claim 39.